

Frequently Asked Questions about Skin Cancer

What is skin cancer?

Half of all new cancers are skin cancers, and more than 1 million new cases of skin cancer will be diagnosed in the United States this year. Skin cancer is a disease in which cancer (*malignant*) cells are found in the outer layers of your skin.

Your skin protects your body against heat, light, infection, and injury. It also stores water and fat and produces vitamin D. The skin has two main layers and several kinds of cells. The top layer of skin is called the *epidermis*. It contains three kinds of cells: flat, scaly cells on the surface called *squamous cells*; round cells called *basal cells*; and cells called *melanocytes*, which give your skin its color.

The inner layer of skin is called the *dermis*. This layer is thicker, and contains blood vessels, nerves, and sweat glands. The hair on your skin also grows from tiny pockets in the dermis, called *follicles*. The dermis makes sweat, which helps to cool your body, and oils that keep your skin from drying out.

What are the different types of skin cancer?

There are several types of cancer that start in the skin. The most common are *basal cell carcinoma* and *squamous cell carcinoma*. Both of these are called *nonmelanoma* skin cancers. They have a better than 95% cure rate if they are detected and treated early.

- **Basal cell carcinoma** is the most common nonmelanoma skin cancer. It begins in the lowest layer of the epidermis, called the basal cell layer. It is slow growing and is not likely to spread to distant parts of the body. About 80% of the new skin cancer cases will be basal cell carcinoma. Squamous cell carcinoma begins in the upper part of the epidermis and can also begin within scars or skin ulcers (crater-like lesions or sores) elsewhere on the body.
- **Squamous cell carcinomas** are more likely to invade tissues beneath the skin, and slightly more likely to spread to distant parts of the body than are basal cell carcinomas. About 16 percent of skin cancers are squamous cell carcinoma.

Melanoma is a type of skin cancer that starts because of uncontrolled growth of pigment-producing tanning cells. It is not as common as basal cell or squamous cell skin cancer, but it is much more serious. Melanomas can suddenly appear without warning, but can also develop from or near a mole. They are mostly found on the upper backs of men and women or on the legs of women, but can occur anywhere on the body. About 4% of new skin cancer cases are melanoma, and more than 80% of skin cancer deaths are from melanoma.

Are some people more likely to get skin cancer than others are?

Skin cancer is more common in people with light colored skin who have spent a lot of time in the sun. Skin cancer can occur anywhere on your body, but it is most common in places that have been exposed to more sunlight, such as your face, neck, hands, and arms. People who have certain diseases such as *lupus erythematosus*, or take certain drugs such as prescription acne drugs, some antibiotics, most birth control pills, or sulfa drugs (to name a few) also can have skin that is much more sensitive to the sun's rays. Some topical creams or lotions for acne and wrinkle reduction creams containing alpha hydroxy acids (AHAs) can also increase your skin's sensitivity to the sun. Always check the product's label to see if it protects the skin from increased sun sensitivity or directs you to use sunscreen products while using it. You also have a higher risk of getting melanoma if:

- you've already had one malignant melanoma
- you have many moles, large moles or unusual moles
- your parents, children or siblings have had melanoma
- you are White with fair skin
- you are a redhead or blonde
- you had a lot of sun exposure in the first 10 to 15 years of life.

How do I know the difference between average bumps and moles and skin cancer? What does skin cancer look like?

Skin cancer can look many different ways. The most common sign of skin cancer is a change on the skin, such as a growth or a sore that won't heal. Sometimes there may be a small lump. This lump can be smooth, shiny and waxy looking, or it can be red or reddish brown. Skin cancer may also appear as a flat red spot that is rough or scaly. Not all changes in your skin are cancer, but you should see your doctor if you notice changes in your skin. Melanoma can form from or near a mole, so it is important to have your health care provider check unusual (atypical) moles that are larger than others, have different colors, or that have irregular edges (borders). The American Academy of Dermatology says that if you notice a mole on your skin, look for the simple "ABCD" warning signs of melanoma:

- **Asymmetry** — one half does not match the other half.
- **Border irregularity** — the edges are ragged, notched or blurred.
- **Color** — the pigmentation is not uniform. Shades of tan, brown or black are present, causing a mottled, or splotchy, appearance. Dashes of red, white, and blue add to the mottled appearance.
- **Diameter** — the width is greater than six millimeters (about the size of a pencil eraser). Any growth of a mole should be of concern.

Malignant melanoma usually begins as a mottled, light brown to black flat blemish with irregular edges and is at least one-quarter inch in size. It can turn red, blue or white, or bleed and crust on the surface.

A skin growth called *actinic keratoses (AKs)* can be the earliest sign of squamous cell carcinoma. AKs are small, scaly spots that form on body parts that have been exposed to the sun. They may start as small, red, flat spots then grow larger and become scaly or thick, like a wart. Most AKs form on the face or back of the hands.

How often should I examine my skin?

Skin care doctors (dermatologists) recommend that everyone do a self-exam of the skin to look for changes, and a monthly mole self-exam. This includes looking at the skin on your whole body, even your scalp, the soles of your feet, between your toes, and on the palms of your hands. People between the ages of 20 and 39 should have a complete skin exam by a health care provider every three years. People over the age of 40 should have a complete skin exam by a health care provider every year.

How is skin cancer diagnosed?

Like most cancers, skin cancer is best treated when it is found (diagnosed) early. If you have a spot or lump on your skin, your doctor may remove the growth and look at the tissue under a microscope. This is called a *biopsy*. A biopsy can usually be done in your doctor's office. Before the biopsy, you will be given a local anesthetic (a shot or cream) to numb the area for a short period of time.

Is there a cure for skin cancer? What are the possible treatments?

Most skin cancers are curable. Your chance of recovery (prognosis) and choice of treatment depend on the type of skin cancer you have and how far it has spread. There are treatments for all patients with skin cancer. Three kinds of treatments are used:

- surgery (removing the cancerous skin or tumor)
- chemotherapy (using drugs to kill cancer cells)
- radiation therapy (using x-rays to kill cancer cells)

Biological therapy (using your body's immune system to fight cancer) is being tested in clinical trials. Women with serious skin cancer can ask their health care provider about this kind of treatment.

Melanoma, the deadliest form of skin cancer, is highly curable when found in its earliest stages. Surgical removal of thin melanomas can cure the disease in most cases. The thicker the melanoma, the lower the survival rate.

Actinic keratoses (AKs) can be removed before they turn into cancer. This can be done with a type of laser treatment called photodynamic therapy, by using chemotherapy creams, or by freezing them with liquid nitrogen.

What is the UV Index?

The UV Index is a number from 0 to 10+ that indicates the amount of ultraviolet (UV) radiation reaching the Earth's surface during the hour around noon. The higher the number the greater your exposure to UV radiation if you go outdoors. Sunlight consists of two types of harmful UV radiation, UVA and UVB rays. UVB rays are the sun's burning rays that cause sunburn and skin cancer. UVA rays can go deeper into the skin's base layer. They also cause sunburn and skin cancer. Both UVB and UVA rays can damage the immune system and cause the skin to wrinkle or give it a leathery look. Even though sunburn has been linked to skin cancer, moderate tanning may also produce the same effect. Tanning actually is a sign that the skin has been injured and occurs when UV radiation is absorbed, causing an increase in the activity and number of melanocytes, the cells that produce the pigment melanin.

The National Weather Service forecasts the UV Index daily in 58 U.S. cities, based on local predicted conditions. The index covers about a 30-mile radius from each city. Check the local newspaper or TV and radio news broadcasts to learn the UV Index in your area. It also may be available through your local phone company and is on the Internet at the National Weather Service Climate Prediction Center's home page.

Don't be fooled by cloudy skies. Clouds block no more than 20 percent of UV radiation. UV radiation also can pass through water, so don't assume you're safe from UV radiation if you're in the water and feeling cool. Also, be especially careful on the beach and in the snow because sand and snow reflect sunlight and increase the amount of UV radiation you receive.

How can I reduce the chances that I will get skin cancer?

1. Avoid too much sunlight, especially between 10 a.m. and 4 p.m., when the sun's rays are strongest. Also avoid the sun when the UV Index is high in your area.
2. Use sunscreen. Use a broad-spectrum sunscreen that protects against both UVA and UVB rays with a Sun Protection Factor (SPF) of at least 15. Apply a thick layer to dry skin 15 to 30 minutes every time before going outdoors. Don't wait until you're outdoors or at the beach to apply sunscreen, because it needs 15 to 30 minutes to fully soak into your skin. It should be applied evenly on all exposed skin, including lips, nose, ears, neck, scalp (if hair is thinning), hands, feet, and eyelids. Take care not to get sunscreen in the eyes because it can irritate them. If sunscreen gets in the eyes, rinse them out with clean water. (Despite a common myth, sunscreen does not blind children if it gets in their eyes.) All sunscreens need to be reapplied every two hours or right after swimming, or after activities that cause a lot of sweating.

You should keep your baby out of the sun and dress him or her in lightweight long pants and long-sleeved shirts to prevent sunburn. Previously, the use of sunscreen on babies younger than 6 months was not advised. But, the American Academy of Pediatrics (AAP) now says that it may be safe to use sunscreen on infants younger than 6 months of age when protective clothing and shade are not available, since there is no evidence that using sunscreen on small areas of a baby's skin causes harm. Parents can apply a small amount of sunscreen to the infant's face and the back of the hands. Besides sunburn, infants and children may be more at risk for eye injury from the sun. The AAP says children, including infants, should wear hats with a brim and sunglasses designed to block at least 99 percent of the sun's rays.

3. Wear sunglasses. Sunglasses can help protect your eyes from sun damage. The ideal sunglasses don't have to be expensive, but they should block 99 to 100 percent of UVA and UVB radiation. Check the label to see that they do. If there's no label, don't buy the glasses. And, don't go by how dark the glasses are because UV protection comes from an invisible chemical applied to the lenses, not from the color or darkness of the lenses.
4. Cover up. Wear lightweight, loose-fitting, long-sleeved shirts, pants or long skirts as much as possible when in the sun. Most materials and colors absorb or reflect UV rays. Tightly woven cloth is best. Avoid wearing wet clothes, such as a wet T-shirt, because when clothes get wet, the sun's rays can more easily pass through. If you see light through a fabric, UV rays can get through, too.

There is sun-protective clothing (SPC) available through a wide array of manufacturers. Sun-protective fabrics typically have a tighter weave or knit and are often darker in color than most summer fabrics. Clothing made with this fabric may have a label listing the garment's Ultraviolet Protection Factor (UPF) value, or level of protection the garment provides from the sun's harmful UV rays. UPF values range from 15 to 50 and the higher the UPF rating, the greater the level of protection the garment provides from the sun. To ensure consumer protection, the U.S. Federal Trade Commission (FTC) monitors advertising claims from SPC manufacturers. Wear a hat. Be sure to wear a wide-brimmed hat that protects your face, eyes, ears, and the back of your neck. Remember that a baseball style cap does not protect the back of the neck or sides of the face.

5. Avoid artificial tanning such as tanning booths. Artificial radiation has the same risks as natural sunlight.
6. Have a health care provider inspect your skin once a year. Do skin self-exams regularly. You can even ask a loved one or friend to inspect your back once in awhile.

The National Women's Health Information Center (NWHIC)

A Project of the Office on Women's Health in the U.S. Department of Health and Human Services

For more information . . .

You can find out more about skin cancer by contacting the National Women's Health Information Center at 1-800-994-9662 or the following organizations:

National Cancer Institute

1-800-4-CANCER

www.nci.nih.gov.

Food and Drug Administration

www.fda.gov

American Cancer Society

800-227-2345

www.cancer.org

Skin Cancer Foundation

(212) 725-5176

www.skincancer.org

American Academy of Dermatology

www.aad.org

Federal Trade Commission

1-877-FTC-HELP

www.ftc.gov

National Weather Service

www.nws.noaa.gov

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